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# RAW SEQUENCE LISTING PATENT APPLICATION US/09/489,079

DATE: 02/11/2000  
TIME: 09:59:31

Input Set: I489079.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

# ENTERED

1 <110> APPLICANT: Billing-Medel, Patricia  
2 Cohen, Maurice  
3 Colpitts, Tracey  
4 Friedman, Paula  
5 Gordon, Julian  
6 Granados, Ed  
7 Hodges, Steve  
8 Klass, Mike  
9 Kratochvil, Jon  
10 Russell, John  
11 Stroupe, Steve  
12 <120> TITLE OF INVENTION: Reagents and Methods Useful for  
13 Detecting Diseases of the Breast  
14 <130> FILE REFERENCE: 6451.US.P1  
15 <140> CURRENT APPLICATION NUMBER: US/09/489,079  
16 <141> CURRENT FILING DATE: 2000-01-21  
17 <160> NUMBER OF SEQ ID NOS: 30  
18 <170> SOFTWARE: FastSEQ for Windows Version 3.0  
19 <210> SEQ ID NO 1  
20 <211> LENGTH: 254  
21 <212> TYPE: DNA  
22 <213> ORGANISM: Homo sapiens  
23 <220> FEATURE:  
24 <221> NAME/KEY: base\_polymorphism  
25 <222> LOCATION: 94  
26 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a  
27 this position  
28 <400> SEQUENCE: 1  
29 gtatacatc tttattaatc attttgcttc caacccatt tagcctgcc ttgaaatgca 60  
30 aaagtctgtt ccaaataaag ccttggaatt gaanaatgaa caaacattga gagcagatga 120  
31 gatactccca tcagaatcca aacaaaagga ctatgaagaa agttcttggg attctgagag 180  
32 tctctgtgag actgtttcac agaaggatgt gtgtttaccc aaggctgcgc atcaaaaaga 240  
33 aatagataaa ataa 254  
34 <210> SEQ ID NO 2  
35 <211> LENGTH: 278  
36 <212> TYPE: DNA  
37 <213> ORGANISM: Homo sapiens  
38 <400> SEQUENCE: 2  
39 gaaatgcaaa agtctgttcc aaataaagcc ttggaattga agaatgaaca aacattgaga 60  
40 gcagatgaga tactcccatc agaatccaaa caaaaggact atgaagaaag ttcttgggat 120  
41 tctgagagtc tctgtgagac tgtttcacag aaggatgtgt gtttaccocaa ggctgcgcac 180  
42 caaaaagaaa tagataaaat aaatggaaaa ttagaagggt ctctgttaa agatggtcct 240  
43 ctgaaggcta actgcggaat gaaagtttct attccaac 278  
44 <210> SEQ ID NO 3

w--&gt; OK

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45 <211> LENGTH: 294  
46 <212> TYPE: DNA  
47 <213> ORGANISM: Homo sapiens  
48 <220> FEATURE:  
49 <221> NAME/KEY: base\_polymorphism  
50 <222> LOCATION: 276  
51 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a  
52 this position  
53 <400> SEQUENCE: 3  
54 ttttgccttct gacagtttct ttttcagtac acaaaacttc tttttcattt gttccatttt 60  
55 tcctgtacgt tggtcacagt gatctttttg aagttccctt gctctttcac aagaatgaac 120  
56 tgtatccaag atttttgata ggctagtga atcttctaata tttccactta ttttatccat 180  
57 ttctttttga tgtgtagcct tgggtacaca cacatcctct gtgaaacagt ctcacggaga 240  
58 ctctcagaat ccacaagaatt ttctcaacct tctttngttt tgattctgaa ggga 294  
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59 <210> SEQ ID NO 4  
60 <211> LENGTH: 248  
61 <212> TYPE: DNA  
62 <213> ORGANISM: Homo sapiens  
63 <220> FEATURE:  
64 <221> NAME/KEY: base\_polymorphism  
65 <222> LOCATION: 247  
66 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a  
67 this position  
68 <400> SEQUENCE: 4  
69 cagaatcaaaa acaaaagaag gttgaagaaa attcttggga ttctgagagt ctccgtgaga 60  
70 ctgtttcaca gaaggatgtg tgtgtacca aggctacaca tcaaaaagaa atggataaaa 120  
71 taagtggaaa attagaagat tcaactagcc tatcaaaaat cttggataca gttcattctt 180  
72 gtgaaagagc aagggaactt caaaaagatc actgtgaaca acgtacagga aaaatggaac 240  
73 aaatgana 248  
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75 <211> LENGTH: 254  
76 <212> TYPE: DNA  
77 <213> ORGANISM: Homo sapiens  
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79 <221> NAME/KEY: base\_polymorphism  
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84 <221> NAME/KEY: base\_polymorphism  
85 <222> LOCATION: 10  
86 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a  
87 this position  
88 <220> FEATURE:  
89 <221> NAME/KEY: base\_polymorphism  
90 <222> LOCATION: 19  
91 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a  
92 this position  
93 <220> FEATURE:  
94 <221> NAME/KEY: base\_polymorphism

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95 <222> LOCATION: 35  
 96 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a  
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 98 <220> FEATURE:  
 99 <221> NAME/KEY: base\_polymorphism  
 100 <222> LOCATION: 39  
 101 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a  
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 103 <220> FEATURE:  
 104 <221> NAME/KEY: base\_polymorphism  
 105 <222> LOCATION: 45  
 106 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a  
 107 this position  
 108 <220> FEATURE:  
 109 <221> NAME/KEY: base\_polymorphism  
 110 <222> LOCATION: 59  
 111 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a  
 112 this position  
 113 <220> FEATURE:  
 114 <221> NAME/KEY: base\_polymorphism  
 115 <222> LOCATION: 173  
 116 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a  
 117 this position  
 118 <400> SEQUENCE: 5  
 W-->OK 119 gngctctgcn gtgtgaggnt tctcacactc atganaatna aaatnatctc ttacatgana 60  
 120 attgcatgtt gaaaaaggaa attgccatgc taaaactgga aatagccaca ctgaaacacc 120  
 W-->OK 121 aataccagga aaaggaaaat aaatactttg aggacattaa gattttaaaa ganaagaatg 180  
 122 ctgaacttca gatgacccta aaactgaaag aggaatcatt aactaaaagg gcattctcaat 240  
 123 atagtgggca gctt 254  
 124 <210> SEQ ID NO 6  
 125 <211> LENGTH: 267  
 126 <212> TYPE: DNA  
 127 <213> ORGANISM: Homo sapiens  
 128 <220> FEATURE:  
 129 <221> NAME/KEY: base\_polymorphism  
 130 <222> LOCATION: 45  
 131 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a  
 132 this position  
 133 <220> FEATURE:  
 134 <221> NAME/KEY: base\_polymorphism  
 135 <222> LOCATION: 51  
 136 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a  
 137 this position  
 138 <400> SEQUENCE: 6  
 W-->OK 139 ttcaagaaaa agtcaagaac ctgctttcca cattgcagga gatgncttgt ntgcaaagaa 60  
 140 aaatgaatgt tgatgtgagt agtacgatat ataacaatga ggtgctccat caaccacttt 120  
 141 ctgaagctca aaggaaatcc aaaagcctaa aaattaatct caattatgcc ggagatgctc 180  
 142 taagagaaaa tacattgggt tcagaacatg cacaaagaga ccaacgtgaa acacagtgtc 240  
 143 aaatgaagga agctgaacac atgtatc 267  
 144 <210> SEQ ID NO 7

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145 <211> LENGTH: 240  
146 <212> TYPE: DNA  
147 <213> ORGANISM: Homo sapiens  
148 <220> FEATURE:  
149 <221> NAME/KEY: base\_polymorphism  
150 <222> LOCATION: 46  
151 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a  
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153 <220> FEATURE:  
154 <221> NAME/KEY: base\_polymorphism  
155 <222> LOCATION: 74  
156 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a  
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158 <220> FEATURE:  
159 <221> NAME/KEY: base\_polymorphism  
160 <222> LOCATION: 233  
161 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a  
162 this position  
163 <220> FEATURE:  
164 <221> NAME/KEY: base\_polymorphism  
165 <222> LOCATION: 234  
166 <223> OTHER INFORMATION: /note = "'n' represents an a or g or t or c polymorphism a  
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168 <400> SEQUENCE: 7  
W--> 169 cctaggcgcc tagtgaaacc ctgtgtcaaa aagaaaaaaa caaaaancaaa cttccaagac 60  
W--> 170 ctcgagtgggt tttnnggagac cctgtatcac ttcaaataat gtgttaaaca agcatcttca 120  
W--> 171 tctcattaaa tagaaatggt gaaaaattgc ttttggaata attgacttat ggatatttca 180  
W--> 172 tcaaatttac agttggctat gctttcttat tgtgcatact atgaaatggt ttnnttcatt 240  
173 <210> SEQ ID NO 8  
174 <211> LENGTH: 2683  
175 <212> TYPE: DNA  
176 <213> ORGANISM: Homo sapiens  
177 <400> SEQUENCE: 8  
178 agtatacatt ctttattaat cattttgctt ccaaccccat ttagcctgcc attgaaatgc 60  
179 aaaagtctgt tccaaataaa gccttggaat tgaagaatga acaaacattg agagcagatg 120  
180 agatactccc atcagaatcc aaacaaaagg actatgaaga aagttcttgg gattctgaga 180  
181 gtctctgtga gactgtttca cagaaggatg tgtgtttacc caaggctgcg catcaaaaag 240  
182 aaatagataa aataaatgga aaattagaag ggtctcctgt taaagatggt cttctgaagg 300  
183 ctaactgcgg aatgaaagtt tctattccaa ctaaagcctt agaattgatg gacatgcaaa 360  
184 ctttcaaagc agagcctccc gagaagccat ctgccttcga gcctgccatt gaaatgcaaa 420  
185 agtctgttcc aaataaagcc ttggaattga agaatagaaca aacattgaga gcagatgaga 480  
186 tactcccatc agaatccaaa caaaaaggact atgaagaaaag ttcttgggat tctgagagtc 540  
187 tctgtgagac tgtttcacag aaggatgtgt gtttacccaa ggctacacat caaaaagaaa 600  
188 tagataaaat aaatggaaaa ttagaagagt ctctgataa tgatggtttt ctgaaggctc 660  
189 cctgcagaat gaaagtttct attccaacta aagccttaga attgatggac atgcaaaactt 720  
190 tcaaagcaga gcctcccgag aagccatctg ccttcgagcc tgccattgaa atgcaaaaagt 780  
191 ctgttccaaa taaagccttg gaattgaaga atgaacaaac attgagagca gatcagatgt 840  
192 tcccttcaga atcaaaaacaa aagaacgttg aagaaaattc ttgggattct gagagtctcc 900  
193 gtgagactgt ttcacagaag gatgtgtgtg tacccaaggc tacacatcaa aaagaaatgg 960  
194 ataaaataag tggaaaatta gaagattcaa ctagcctatc aaaaatcttg gatacaattc 1020

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196	tggaacaaat	gaaaaagaag	ttttgtgtac	tgaaaaagaa	actgtcagaa	gcaaaagaaa	1140
197	taaaatcaca	gttagagaac	caaaaagtta	aatgggaaca	agagctctgc	agtgtgaggt	1200
198	ttctcacact	catgaaaatg	aaaattatct	cttacctgaa	aattgcatgt	tgaaaaagga	1260
199	aattgccatg	ctaaaactgg	aaatagccac	actgaaacac	caataccagg	aaaaggaaaa	1320
200	taaatacttt	gaggacatta	agattttaaa	agaaaagaat	gctgaacttc	agatgaccct	1380
201	aaaactgaaa	gaggaatcat	taactaaaag	ggcatctcaa	tatagtgggc	agcttaaaagt	1440
202	tctgatagct	gagaacacaa	tgctcacttc	taaattgaag	gaaaaacaag	acaaagaaat	1500
203	actagaggca	gaaattgaat	cacaccatcc	tagactggct	tctgctgtac	aagaccatga	1560
204	tcaaattgtg	acatcaagaa	aaagtcaaga	acctgctttc	cacattgcag	gagatgcttg	1620
205	tttgcaaaga	aaaatgaatg	ttgatgtgag	tagtacgata	tataacaatg	aggtgctcca	1680
206	tcaaccactt	tctgaagctc	aaaggaaatc	caaaagccta	aaaattaatc	tcaattatgc	1740
207	aggagatgct	ctaagagaaa	atacattggt	ttcagaacat	gcacaaagag	accaacgtga	1800
208	aacacagtgt	caaatgaagg	aagctgaaca	catgtatcaa	aacgaacaag	ataatgtgaa	1860
209	caaacacact	gaacagcagg	agtctctaga	tcagaaatta	tttcaactac	aaagcaaaaa	1920
210	tatgtggctt	caacagcaat	tagttcatgc	acataagaaa	gctgacaaca	aaagcaagat	1980
211	aacaattgat	attcattttc	ttgagaggaa	aatgcaacat	catctcctaa	aagagaaaaa	2040
212	tgaggagata	tttaattaca	ataaccattt	aaaaaacctg	atatatcaat	atgaaaaaga	2100
213	gaaagcagaa	acagaaaaat	catgagagac	aagcagtaag	aaacttcttt	tggagaaaca	2160
214	acagaccaga	tctttactca	caactcatgc	taggaggcca	gtcctagcat	caccttatgt	2220
215	tgaaaatctt	accaatagtc	tgtgtcaaca	gaatacttat	tttagaagaa	aaattcatga	2280
216	tttcttcctg	aagcctacag	acataaaaata	acagtgtgaa	gaattacttg	ttcacgaatc	2340
217	tcgctctgca	ctccagccta	ggcgcttagt	gaaaccctgt	gtcaaaaaga	aaaaaacaaa	2400
218	aacaaacttc	caagacctcg	agtggttttt	ggagaccctg	tatcacttca	aataatgtgt	2460
219	taaacaagca	tcttcatctc	attaaataga	aatgttgaaa	aattgctttt	ggaataattg	2520
220	acttatggat	atttcatcaa	atttacagtt	ggctatgctt	tcttattgtg	catactatga	2580
221	aatggttttc	ttcaaaaagt	gtttataagt	ggtaagttta	agaatggggt	tgacagcatt	2640
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230	agatactccc	atcagaatcc	aaacaaaagg	actatgaaga	aagttcttgg	gattctgaga	180
231	gtctctgtga	gactgtttca	cagaaggatg	tgtgtttacc	caaggctgcy	catcaaaaag	240
232	aaatagataa	aataaatgga	aaattagaag	ggtctcctgt	taaagatggg	cttctgaagg	300
233	ctaactgcgg	aatgaaagtt	tctattccaa	ctaaagcctt	agaattgatg	gacatgcaaa	360
234	ctttcaaagc	agagcctccc	gagaagccat	ctgccttcga	gcctgccatt	gaaatgcaaa	420
235	agtctgtttc	aaataaagcc	ttggaattga	agaatgaaca	aacattgaga	gcagatgaga	480
236	tactcccatc	agaatccaaa	caaaaggact	atgaagaaag	ttcttgggat	tctgagagtc	540
237	tctgtgagac	tgtttcacag	aaggatgtgt	gtttacccaa	ggctacacat	caaaaagaaa	600
238	tagataaaat	aaatggaaaa	ttagaagagt	ctcctgataa	tgatggtttt	ctgaagggtc	660
239	cctgcagaat	gaaagtcttc	attccaacta	aagccttaga	attgatggac	atgcaaaactt	720
240	tcaaaagcaga	gcctcccggag	aagccatctg	ccttcgagcc	tgccattgaa	atgcaaaaagt	780
241	ctgtttccaaa	taaagccttg	gaattgaaga	atgaacaaac	attgagagca	gatcagatgt	840
242	tcccttcaga	atcaaaaaca	aagaacgttg	aagaaaaattc	ttgggattct	gagagtctcc	900
243	gtgagactgt	ttcacagaag	gatgtgtgtg	tacccaaggc	tacacatcaa	aaagaaatgg	960
244	ataaaaataag	tggaaaatta	gaagattcaa	ctagcctatc	aaaaatcttg	gatacaattc	1020

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73	W	"N" or "Xaa" used: Feature required	aaatgana
119	W	"N" or "Xaa" used: Feature required	gngctctgcn gtgtgaggnt tctcacactc atganaat
121	W	"N" or "Xaa" used: Feature required	aataccagga aaaggaaaat aaatactttg aggacatt
139	W	"N" or "Xaa" used: Feature required	ttcaagaaaa agtcaagaac ctgctttcca cattgcag
169	W	"N" or "Xaa" used: Feature required	cctaggcgcc tagtgaaacc ctgtgtcaaa aagaaaaa
170	W	"N" or "Xaa" used: Feature required	ctcgagtggg tttnggagac cctgtatcac ttcaaata
172	W	"N" or "Xaa" used: Feature required	tcaaatttac agttggctat gctttcttat tgtgcata